This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

Claims 1-13 (cancelled)

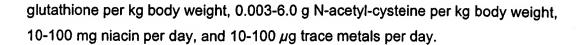
- Claim 14 (Currently amended): A method of treating a disease or an injury in a mammal induced by pathological free radical reactions in a mammal exposed exposure to a caustic gas, the method comprising administering to the mammal an effective amount of an amphipathic antioxidant composition comprising:
  - (i) a population of liposomes suitable for undergoing peroxidation and lysis; and
  - (ii) at least two non-enzymatic, amphipathic antioxidants, wherein the amphipathic antioxidant composition quenches free radicals and reduces the damage induced by the caustic gas exposure.
- Claim 15 (Previously presented): The method of claim 14, wherein said non-enzymatic antioxidants are selected from the group consisting of: beta-carotene, vitamin E, vitamin C, glutathione, niacin, and N-acetyl-cysteine.
- Claim 16 (Previously presented): The method of claim 14, wherein at least one of the nonenzymatic antioxidants is hydrophilic and at least one of the non-enzymatic antioxidants is hydrophobic.
- Claim 17 (Previously presented): The method of claim 14, wherein said composition further comprises at least one trace metal.
- Claim 18 (Previously presented): The method of claim 17, wherein said at least one trace metal is selected from the group consisting of zinc, selenium, chromium, copper and manganese.
- Claim 19 (Previously presented): The method of claim 14, wherein said composition further comprises a pharmaceutically acceptable carrier.
- Claim 20 (Previously presented): The method of claim 14, wherein said composition is administered by a route of administration selected from the group consisting of:

intravenous, intraperitoneal, subcutaneous, intramuscular, intraarticular, intraarterial, intracerebral, intracerebellar, intrabronchial, intrathecal, topical, and aerosol route.

- Claim 21 (Currently amended): A method of treating a disease or an injury in a mammal induced by pathological free radical reactions in a mammal exposed exposure to a caustic gas, the method comprising administering to the mammal an effective amount of an amphipathic antioxidant composition comprising:
  - (i) a population of liposomes suitable for undergoing peroxidation and lysis; and
  - (ii) at least two non-enzymatic amphipathic antioxidants selected from the group consisting of: beta-carotene, vitamin E, vitamin C, glutathione, N-acetyl-cysteine, and niacin,

wherein the amphipathic antioxidant composition quenches free radicals and reduces the damage induced by the caustic gas exposure.

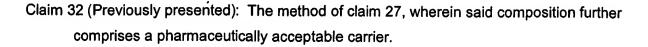
- Claim 22 (Previously presented): The method of claim 21, wherein said amphipathic antioxidant composition further comprises at least one trace metal.
- Claim 23 (Previously presented): The method of claim 22, wherein said at least one trace metal is selected from the group consisting of zinc, selenium, chromium, copper and manganese.
- Claim 24 (Previously amended): The method according to claim 22, wherein composition includes an amount of beta-carotene, vitamin E, vitamin C, glutathione, niacin, and trace metals sufficient to deliver 0.0005-1.0 g beta-carotene per kg body weight, 0.001-10 g vitamin E per kg body weight, 0.001-2.0 g vitamin C per kg body weight, 0.001-2.0 g glutathione per kg body weight, 0.003-6.0 g N-acetyl-cysteine per kg body weight, 1-1000 mg niacin per day, and 1-1000 µg trace metals per day.
- Claim 25 (Previously amended): The method according to claim 22, wherein the composition includes an amount of beta-carotene, vitamin E, vitamin C, glutathione, niacin, and trace metals sufficient to deliver 0.005-1.0 g beta-carotene per kg body weight, 0.01-1.0 g vitamin E per kg body weight, 0.01-1.0 g



- Claim 26 (Previously amended): The method according to claim 22, wherein the composition includes an amount of beta-carotene, vitamin E, vitamin C, and glutathione sufficient to deliver 0.05-1.0 g beta-carotene per kg body weight, 0.1-1.0 g vitamin E per kg body weight, 0.1-1.0 g vitamin C per kg body weight, 0.1-1.0 g glutathione per kg body weight, 0.003-6.0 g N-acetyl-cysteine per kg body weight, 10-100 mg niacin per day, and 10-100 µg trace metals per day.
- Claim 27 (Currently amended): A method for reducing the deleterious effects of a caustic gas pathological free radical reactions in a mammal with a disease or injury induced by exposure exposed to a the caustic gas, the method comprising administering an effective amount of an amphipathic antioxidant composition comprising:
  - (i) a population of liposomes suitable for undergoing peroxidation and lysis; and
  - (ii) at least two non-enzymatic, amphipathic antioxidants, wherein the amphipathic antioxidant composition quenches free radicals and reduces the damage induced by the caustic gas exposure.
- Claim 28 (Previously presented): The method of claim 27, wherein said non-enzymatic antioxidants are selected from the group consisting of: beta-carotene, vitamin E, vitamin C, glutathione, niacin, and N-acetyl-cysteine.
- Claim 29 (Previously presented): The method of claim 27, wherein at least one of the nonenzymatic antioxidants is hydrophilic and at least one of the non-enzymatic antioxidants is hydrophobic.
- Claim 30 (Previously presented): The method of claim 27, wherein said composition further comprises at least one trace metal.
- Claim 31 (Previously presented): The method of claim 30, wherein said at least one trace metal is selected from the group consisting of zinc, selenium, chromium, copper and manganese.

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- Claim 33 (Previously presented): The method of claim 27, wherein said composition is administered by a route of administration selected from the group consisting of: intravenous, intraperitoneal, subcutaneous, intramuscular, intraarticular, intraarterial, intracerebral, intracerebellar, intrabronchial, intrathecal, topical, and aerosol route.
- Claim 34 (Currently amended): A method for reducing the deleterious effects of a caustic gas pathological free radical reactions in a mammal with a disease or injury induced by exposure exposed to a the caustic gas, the method comprising administering an effective amount of an amphipathic antioxidant composition comprising:
  - (i) a population of liposomes suitable for undergoing peroxidation and lysis; and
  - (ii) at least two non-enzymatic amphipathic antioxidants selected from the group consisting of: beta-carotene, vitamin E, vitamin C, glutathione, N-acetyl-cysteine, and niacin.

wherein the amphipathic antioxidant composition quenches free radicals and reduces the damage induced by the caustic gas exposure.

- Claim 35 (Previously presented): The method of claim 34, wherein said amphipathic antioxidant composition further comprises at least one trace metal.
- Claim 36 (Previously presented): The method of claim 35, wherein said at least one trace metal is selected from the group consisting of zinc, selenium, chromium, copper and manganese.
- Claim 37 (Previously amended): The method according to claim 35, wherein the composition includes an amount of beta-carotene, vitamin E, vitamin C, glutathione, niacin, and trace metals sufficient to deliver 0.0005-1.0 g beta-carotene per kg body weight, 0.001-10 g vitamin E per kg body weight, 0.001-2.0 g vitamin C per kg body weight, 0.001-2.0 g glutathione per kg body weight, 0.003-6.0 g N-acetyl-cysteine per kg body weight, 1-1000 mg niacin per day, and 1-1000  $\mu$ g trace metals per day.

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Claim 38 (Previously amended): The method according to claim 35, wherein the composition includes an amount of beta-carotene, vitamin E, vitamin C, glutathione, niacin, and trace metals sufficient to deliver 0.005-1.0 g beta-carotene per kg body weight, 0.01-1.0 g vitamin E per kg body weight, 0.01-1.0 g vitamin C per kg body weight, 0.01-1.0 g glutathione per kg body weight, 0.003-6.0 g N-acetyl-cysteine per kg body weight, 10-100 mg niacin per day, and 10-100 µg trace metals per day.

Claim 39 (Previously amended): The method according to claim 35, wherein the composition includes an amount of beta-carotene, vitamin E, vitamin C, and glutathione sufficient to deliver 0.05-1.0 g beta-carotene per kg body weight, 0.1-1.0 g vitamin E per kg body weight, 0.1-1.0 g vitamin C per kg body weight, 0.1-1.0 g glutathione per kg body weight, 0.003-6.0 g N-acetyl-cysteine per kg body weight, 10-100 mg niacin per day, and 10-100 g trace metals per day.